

Title (en)
BALL BEARING FOR SPINDLE PIVOT SECTION OF MACHINE TOOL, AND SPINDLE PIVOT DEVICE OF MACHINE TOOL, USING THE SAME

Title (de)
BALLLAGER FÜR DEN SPINDELDREHABSCHNITT EINES MASCHINENWERKZEUGS, UND SPINDELDREHVORRICHTUNG FÜR EIN MASCHINENWERKZEUG DAMIT

Title (fr)
PALIER A BILLES POUR SECTION DE PIVOTEMENT DE BROCHE DE MACHINE-OUTIL, ET DISPOSITIF DE PIVOTEMENT DE BROCHE DE MACHINE-OUTIL ASSOCIE

Publication
EP 1972801 A4 20120905 (EN)

Application
EP 07706685 A 20070112

Priority

- JP 2007050343 W 20070112
- JP 2006006378 A 20060113
- JP 2006122344 A 20060426
- JP 2006213485 A 20060804
- JP 2006247490 A 20060913
- JP 2006337342 A 20061214
- JP 2006338552 A 20061215

Abstract (en)
[origin: EP1972801A1] A ball bearing for spindle turning device for use in the spindle turning device of a machine tool, and a spindle turning device for a machine tool using the same, which is compatible with machine tools whose recent trend is for more composite configurations while maintaining and achieving higher accuracy (higher rotational accuracy), greater stiffness and reductions in torque and heat generation is to be provided. In a ball bearing for spindle turning device for use in the spindle turning device of a machine tool, the sectional size ratio (B/H) between the axially cut sectional width B and the radially cut sectional height H is set to be $(B/H) < 0.63$ where it is a single row ball bearing or the sectional size ratio $(B2/H2)$ between the axially cut sectional width B2 and the radially cut sectional height H2 $(B2/H2) < 1.2$ where it is a double row ball bearing.

IPC 8 full level
F16C 19/06 (2006.01); **B23Q 1/50** (2006.01); **B23Q 1/52** (2006.01); **F16C 19/08** (2006.01); **F16C 19/16** (2006.01); **F16C 19/18** (2006.01); **F16C 33/58** (2006.01)

CPC (source: EP KR US)
B23Q 1/50 (2013.01 - KR); **F16C 19/08** (2013.01 - KR); **F16C 19/505** (2013.01 - EP US); **F16C 19/542** (2013.01 - EP US); **F16C 19/543** (2013.01 - EP US); **F16C 19/56** (2013.01 - EP US); **F16C 33/3806** (2013.01 - EP US); **F16C 33/58** (2013.01 - KR); **F16C 33/7856** (2013.01 - EP US); **F16C 19/163** (2013.01 - EP US); **F16C 19/184** (2013.01 - EP US); **F16C 2240/40** (2013.01 - EP US); **F16C 2240/70** (2013.01 - EP US); **F16C 2240/80** (2013.01 - EP US); **F16C 2322/39** (2013.01 - EP US); **Y10T 483/1705** (2015.01 - EP US)

Citation (search report)

- No further relevant documents disclosed
- See references of WO 2007080980A1

Designated contracting state (EPC)
DE

DOCDB simple family (publication)
EP 1972801 A1 20080924; EP 1972801 A4 20120905; EP 1972801 B1 20160316; CN 101341347 A 20090107; CN 101341347 B 20120215; KR 101057311 B1 20110817; KR 20080084893 A 20080922; US 2009131235 A1 20090521; WO 2007080980 A1 20070719

DOCDB simple family (application)
EP 07706685 A 20070112; CN 200780000826 A 20070112; JP 2007050343 W 20070112; KR 20077030965 A 20070112; US 99651007 A 20070112